

PhD student

Van der Waals heterostructures for vertical organic transistors

A PhD student position is open in the “*molecular nanostructures & devices (NCM)*” group at the Institute for Electronics Microelectronics and Nanotechnologies (IEMN), a CNRS laboratory located at the university of Lille – France.

This position is open in the context of collaborative project funded by Agence National de la Recherche and Swiss National Science Foundation. It is a project between our group and the Laboratory “*Transport at Nanoscale Interfaces*” lead by prof. Michel Calame at EMPA at Dübendorf (near Zurich). This group develop fundamental understanding in the optoelectronic, thermal and ionic transport properties of low-dimensional materials & devices and transfer this knowledge to applications for biochemical sensing and bioelectronics. .

We are looking for a highly motivated PhD student with a master degree in condensed matter physics, materials science, nanoscience or a related discipline and a strong interest for 2D materials, nano-fabrication and interdisciplinary research. The position requires a good autonomy and initiative to work in a multidisciplinary area. Good communication skills (written and oral) in English are also mandatory.

The “molecular nanostructures & devices” group is mainly interested in the electronic properties of organic nanostructures and molecular-scale electronics devices. IEMN (www.iemn.fr) is a widely recognized nanotechnology research centres in France with world-class clean-room equipments, electrical characterization and simulation capabilities, near-field scanning probe platform. Our group is well equipped with a platform for “materials and organic devices”. We have a large experience for molecular materials and nano-devices fabrication and characterization. For more details: www.nanomol.wordpress.com

The position is funded for up to 3 years, the foreseen starting date is February 1, 2019.

Applicants should send by e-mail: A detailed curriculum-vitae, letter of motivation, diplomas with transcripts and contact details of two referees to : *Dominique Vuillaume*, research director at CNRS, head of the “molecular nanostructures & devices” group: dominique.vuillaume@iemn.fr